

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P28118/WO Kf	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/EP2004/005904	International filing date (day/month/year) 01.06.2004	Priority date (day/month/year) 11.07.2003	
International Patent Classification (IPC) or national classification and IPC B62D5/093, B62D3/14, B62D5/06, B62D9/00, B62D5/09			
Applicant BRUENINHAUS HYDROMATIK GMBH			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 4 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																								
<p>4. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005904

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:

international search (Rule 12.3 and 23.1(b))
 publication of the international application (Rule 12.4)
 international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

the international application as originally filed/furnished
 the description:

pages 1-15 as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

the claims:

nos. _____ as originally filed/furnished

nos.* _____ as amended (together with any statement) under Article 19
11.02.2005 with letter

nos.* 1-16 received by this Authority on of 11.02.2005

nos.* _____ received by this Authority on _____

the drawings:

sheets 1/2-2/2 as originally filed/furnished

sheets* _____ received by this Authority on _____

sheets* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (specify): _____
 any table(s) related to sequence listing (specify): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (specify): _____
 any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/005904

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	9, 11-15	YES
	Claims	1-8, 10, 16	NO
Inventive step (IS)	Claims	9, 11-15	YES
	Claims	1-8, 10, 16	NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

1 This report makes reference to the following documents:

D1: FR-A-1 251 296 (BATIGNOLLES CHATILLON)
20 January 1961 (1961-01-20)
D2: US-A-2 816 420 (WALSH JOSEPH H) 17 December
1957 (1957-12-17)
D3: DE 35 36 563 A (ZAHNRADFABRIK
FRIEDRICHSHAFEN) 30 April 1986 (1986-04-30)
D4: US-A-4 367 803 (WITTREN RICHARD A) 11 January
1983 (1983-01-11)
D5: US-A-3370422 - introduced following
establishment of the search report
D6: US-A-3554312 - introduced following
establishment of the search report

2 INDEPENDENT CLAIM 1

The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 lacks novelty (PCT Article 33(2)).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/005904

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Document D1 discloses (the references between parentheses refer to that document):

a hydraulic vehicle steering system comprising at least two steering cylinders (5, 6), in which cylinder pistons (11, 12) can be displaced, the positions of which set the steering angle of the wheels (17, 18), each piston (11, 12) dividing the steering cylinder (5, 6) into two pressure chambers, and comprising a first hydraulic pump (1), which can be adjusted with respect to the swept volume and the first connection (2) of which is connected to one of the pressure chambers of the first (7) and second (9) steering cylinders, depending on the steering direction, the second connection (3) of the hydraulic pump (1) being connected to the other pressure chamber of the first (8) and second (10) steering cylinders.

The subject matter of the independent claim thus lacks novelty over D1.

The subject matter of claim 1 also lacks novelty over D4 - see the passages cited in the search report.

The subsequently introduced documents, D5 (see, e.g., figs. 1-3) and D6 (see, e.g., fig. 3), also disclose the subject matter of claim 1 in a manner that is prejudicial to novelty.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/005904

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

3 DEPENDENT CLAIMS 2-8, 10, 16

Claims 2-8, 10 and 16 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for **novelty** in relation to D1, D5 or D6 taken alone (*for each of claims 2-5*) and in relation to D5, figs. 1-3 (*for the newly submitted claim 16*) and for **inventive step** in relation to D1 (or D5 or D6) and D2 or in relation to D1 (or D5 or D6) and D3 (*for claims 6-8 and 10*). Compare, for example, the passages cited in the search report and figures 1-3 in D5 and figure 3 in D6 (PCT Article 33(1) to (3) and (6)).

4 DEPENDENT CLAIMS 9, 11-15

The combinations of features contained in dependent claims 9 and 11-15 are neither disclosed nor suggested by the available prior art (D1-D4) :

Specifically, the use of a second hydraulic pump for hydraulically controlling the first hydraulic pump in line with the displacement of a steering component is neither disclosed nor suggested in this feature combination by the prior art (compare specifically with D4, figure 1).

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The following points appear to be vague and undefined and as such render the scope of the claim in question unclear; furthermore, the exact meaning thereof is not sufficiently disclosed by the description; claims 3, 4, 6 and 11 therefore fail to meet the requirements of PCT Articles 5 and 6:

Claims 3, 4:

It is not clear from the wording of claims 3 and 4 how the pump is intended to work; it appears as if it is intended that the pump is not a suction pump, but merely a pressure pump; the "two quadrant operation" was interpreted to mean: the direction of displacement and the swept volume are dependent on the steering direction and angle, respectively.

Claim 6:

Claim 6 should include a definition of the function of the control valve in terms of its technical features.

"... a control valve" was interpreted to mean a two-way (not inventive in relation to D3, reference 43) or a multi-way control valve.